PP-B-09

BRITTLE BONE DISEASE BECOMES UNBREAKABLE WITH BISPHOSPHONATE INFUSION

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CASE
Osteogenesis imperfecta is a lifelong inheritable disease and currently has no definitive cure. A 32-year-old female born to a non-consanguineous couple of Filipino descent consulted for chronic back pain. The patient had a history of recurrent fractures on low-intensity trauma starting from her toddler years. She had an unremarkable family history and prenatal and perinatal courses. Physical examination noted short stature with greyish blue scleral hue, triangular face, no bowing of upper and lower extremities, and positive Adam's forward bending test. Laboratory results showed normal serum levels of calcium, phosphorus, vitamin D, and PTH. Spine imaging showed thoracolumbar dextrolevoscoliosis. The patient was clinically diagnosed with Osteogenesis Imperfecta type I and was handled using a multidisciplinary approach composed of physical therapy, surgical interventions, genetic counseling, and bone-targeted therapy. Medical management was done using bisphosphonate therapy for 3 doses. Currently, the patient has minimal back pain with no recurrence of fracture and the latest bone densitometry values are within the expected range for age.

KEYWORDS
osteogenesis imperfecta, bisphosphonate, brittle bone disease

PP-B-10

TRANSIENT HYPERPHOSPHATASEMIA IN CHILDREN TREATED WITH GRISEOFULVIN

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CASE
The hallmark of transient hyperphosphatasemia (TH) is an elevation of serum alkaline phosphatase (ALP), which resolves within a few weeks or months without evidence of liver or bone disease. Despite its unknown etiology, it is frequently found in children under the age of five following an acute viral infection. We report a 7-year-old male who developed TH after receiving griseofulvin treatment for tinea capitis. He complained of fever and generalized erythematous rashes two weeks after treatment. Because of a possible drug allergy, blood tests were evaluated. Liver function showed normal transaminase and bilirubin levels, but the ALP was extremely high (2,657 IU/L). His serum calcium, phosphorus, PTH, and vitamin D were normal. Griseofulvin or viral exanthem were suspected of causing hyperphosphatasemia. Because his scalp lesion was worsening, itraconazole was substituted. After two months of monitoring, his ALP returned to normal. As a result, TH was diagnosed. Therefore, awareness of this event may prevent unnecessary investigations.

KEYWORDS
transient hyperphosphatasemia, hyperphosphatasemia

PP-B-11

SUN EXPOSURE AND VITAMIN D STATUS AND ITS ASSOCIATION WITH BONE TURNOVER MARKERS IN TRANSFUSION-DEPENDENT ADULT THALASSEMIA PATIENTS

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INTRODUCTION
Bone disease in patients with thalassemia, encompassing both osteopenia and osteoporosis, is on the rise, partly due to improvements in treatment and survival rates. Bone metabolism in thalassemia is influenced by many confounding factors including hormonal abnormalities, vitamin D deficiency, and iron load from multiple blood transfusions. Bone turnover markers are potentially useful as non-invasive tests to assess bone remodeling in this high-risk population. Due to the increasing frequency of thalassemia bone disease and limited data on vitamin D status among thalassemia patients in countries with adequate sun exposure, this study aimed to assess vitamin D status and its association with sun exposure, bone turnover markers (BTM) and ferritin in adult transfusion-dependent thalassemia patients in Malaysia.

METHODOLOGY
This cross-sectional study involved transfusion-dependent thalassemia patients (n = 40) from the adult hematology clinic. All participants had anthropometric measurements, sun exposure index (SI) measured by calculating body-surface-area x hours of exposure/week, as well as a complete biochemical profile including ferritin, calcium